

Lake Michigan Fish Community Goal and Guiding Principles

Mark E. Holey
U.S. Fish and Wildlife Service
Green Bay, WI



The Lake Michigan fish community is a highly complex, biological system that requires a broader, ecological approach than offered by single species management

To define objectives for the structure of each of the Great lakes fish communities and develop a means of measuring progress toward their achievement



Goal Statements

Great Lakes Water Quality Agreement

To restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes basin ecosystem

Joint Strategic Plan for Management of Great Lakes Fisheries

To secure fish communities, based on foundations of stable, self-sustaining stocks, supplemented by judicious plantings of hatchery-reared fish, and provide from these communities an optimum contribution of fish, fishing opportunities and associated benefits to meet needs identified by society for:

- WHOLESOME FOOD
- RECREATION
- EMPLOYMENT AND INCOME
- HEALTHY HUMAN ENVIRONMENT

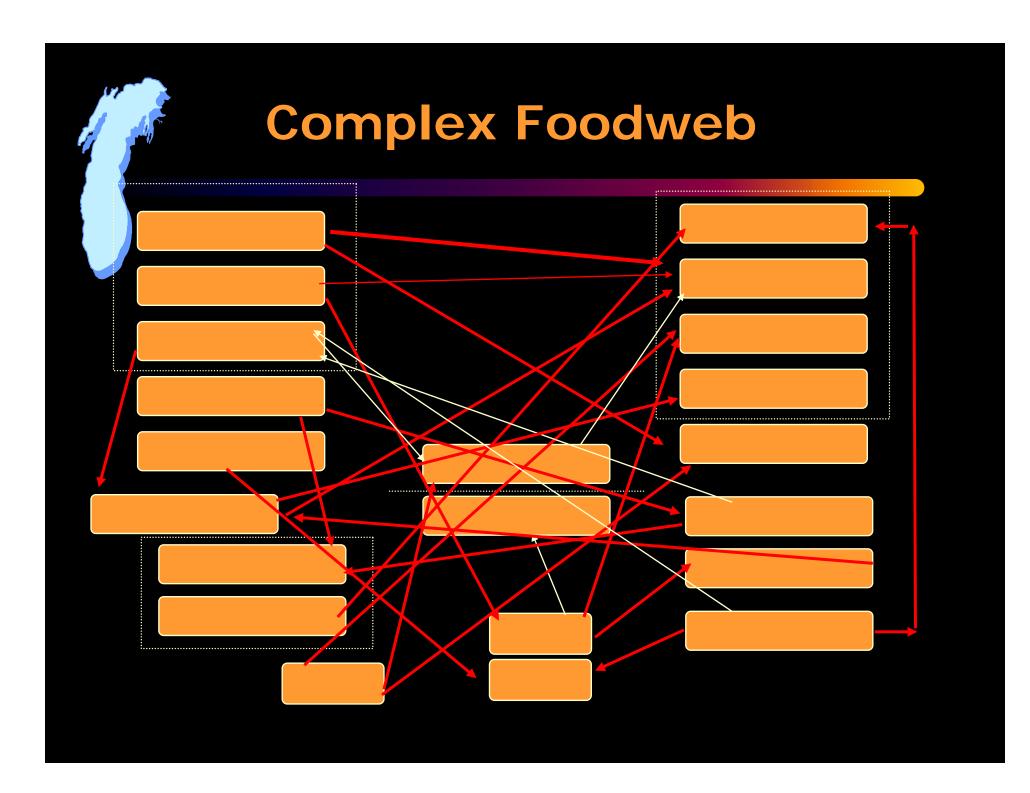
Lake Michigan Fish Community Objectives

Restore and maintain the biological integrity of the fish community so that production of desirable fish is sustainable and ecologically efficient

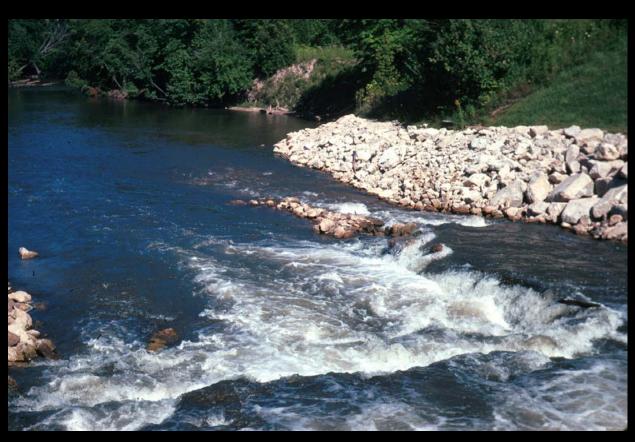
Guiding Principles

Recognize limits of lake productivity





Preserve and restore fish habitat



Preserve native Species



Enhance natural reproduction of native and desirable introduced fishes





Acknowledge the role of planted fish

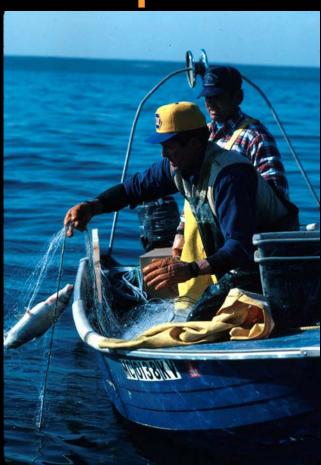
Recognize naturalized species



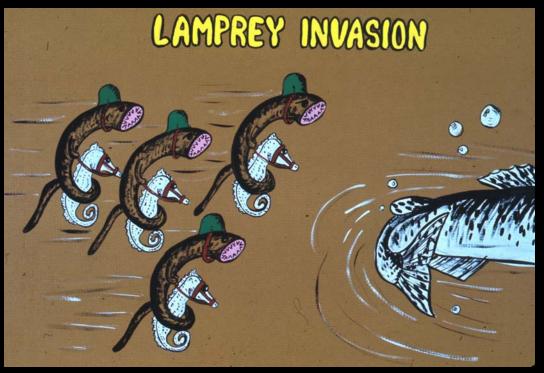


Adopt the genetic stock concept

Recognize that fisheries are an important cultural heritage



Prevent the unintentional introductions of exotic species



Protect and enhance threatened and endangered species



Planktivore Objective



Maintain a diversity of planktivore (prey) species at population levels matched to primary production and to predator demands.

Expectations are for a lakewide planktivore biomass of 0.5 to 0.8 billion kg. (1.2 - 1.7 billion lb.)

Salmonine Objectives (Salmon and Trout)



- Establish diverse salmonine community capable of sustaining an annual harvest of 2.7 to 6.8 million kg (6 to 15 million lb.) of which 20 25% is lake trout
- Establish selfsustaining lake trout populations

